まり

atgatetttg gtgtgaacae aaggeagaae ttagaecatg ttaaagaate aaaaacaggt 61 tetteaggea ttatagtaag gttaageact aaccatttee ggetgacate eegteeceag 121 tgggccttat atcagtatca cattgactat aacccactga tggaagccag aagactccgt 181 tcagctcttc tttttcaaca cgaagatcta attggaaagt gtcatgcttt tgatggaacg 241 atattatttt tacctaaaag actacagcaa aaggttactg aagtttttag taagacccgg 301 aatggagagg atgtgaggat aacgatcact ttaacaaatg aacttccacc tacatcacca 361 acttgtttgc agttctataa tattattttc aggaggcttt tgaaaatcat gaatttgcaa 421 caaattggac gaaattatta taacccaaat gacccaattg atattccaag tcacaggttg 481 gtgatttggc ctggcttcac tacttccatc cttcagtatg aaaacagcat catgctctgc 541 actgacgtta gccataaagt ccttcgaagt gagactgttt tggatttcat gttcaacttt 601 tatcatcaga cagaagaaca taaatttcaa gaacaagttt ccaaagaact aataggttta 661 gttgttctta ccaagtataa caataagaca tacagagtgg atgatattga ctgggaccag 721 aatcccaaga gcacctttaa gaaagccgac ggctctgaag tcagcttctt agaatactac 781 aggaagcaat acaaccaaga gatcaccgac ttgaagcagc ctgtcttggt cagccagccc 841 aagagaaggc ggggccctgg ggggacactg ccagggcctg ccatgctcat tcctgagctc 901 tgctatctta caggtctaac tgataaaatg cgtaatgatt ttaacgtgat gaaagactta 961 gccgttcata caagactaac tccagagcaa aggcagcgtg aagtgggacg actcattgat 1021 tacattcata aaaacgataa tgttcaaagg gagcttcgag actggggttt gagctttgat 1081 tccaacttac tgtccttctc aggaagaatt ttgcaaacag aaaagattca ccaaggtgga 1141 aaaacatttg attacaatcc acaatttgca gattggtcca aagaaacaag aggtgcacca 1201 ttaattagtg ttaagccact agataactgg ctgttgatct atacgcgaag aaattatgaa 1261 gcagccaatt cattgataca aaatctattt aaagttacac cagccatggg catgcaaatg 1321 aqaaaaqcaa taatqattqa agtggatgac agaactgaag cctacttaag agtcttacag 1381 caaaaggtca cagcagacac ccagatagtt gtctgtctgt tgtcaagtaa tcggaaggac 1441 aaatacqatq ctattaaaaa atacctgtgt acagattgcc ctaccccaag tcagtgtgtg 1501 qtqqccqaa ccttaggcaa acagcaaact gtcatggcca ttgctacaaa gattgcccta 1561 cagatgaact gcaagatggg aggagagete tggagggtgg acatececet gaagetegtg 1621 atgategttg geategattg ttaccatgae atgacagetg ggeggaggte aategeagga 1681 tttgttgcca gcatcaatga agggatgacc cgctggttct cacgctgcat atttcaggat 1741 agaggacagg agctggtaga tgggctcaaa gtctgcctgc aagcggctct gagggcttgg 1801 aatagetgea atgagtaeat geecageegg ateategtgt acegegatgg egtaggagae 1861 qqccaqctqa aaacactqqt gaactacgaa gtgccacagt ttttggattg tctaaaatcc 1921 attggtagag gttacaaccc tagactaacg gtaattgtgg tgaagaaaag agtgaacacc 1981 agattttttg ctcagtctgg aggaagactt cagaatccac ttcctggaac agttattgat 2041 gtagaggtta ccagaccaga atggtatgac ttttttatcg tgagccaggc tgtgagaagt 2101 ggtagtgttt ctcccacaca ttacaatgtc atctatgaca acagcggcct gaagccagac 2161 cacatacage gettgaceta caagetgtge cacatetatt acaactggee aggtgteatt 2221 cgtgttcctg ctccttgcca gtacgcccac aagctggctt ttcttgttgg ccagagtatt 2281 cacagagage caaatetgte actgteaaac egeetttaet acetetaa

Figure 1

300 9 180 210 240 270 Cys Tyr Leu Thr Gly Leu Thr Asp Lys Met Arg Asn Asp Phe Asn Val Met Lys Asp Leu Ala Val His Thr Arg Leu Thr Pro Glu Gln 330 150 390 9 420 480 30 120 450 Arg Gln Arg Glu Val Gly Arg Leu Ile Asp Tyr Ile His Lys Asn Asp Asn Val Gln Arg Glu Leu Arg Asp Trp Gly Leu Ser Phe Asp Asn His Phe Arg Leu Thr Ser Arg Pro Gln Trp Ala Leu Tyr Gln Tyr His Ile Asp Tyr Asn Pro Leu Met Glu Ala Arg Arg Leu Arg Thr Asp Val Ser His Lys Val Leu Arg Ser Glu Thr Val Leu Asp Phe Met Phe Asn Phe Tyr His Gln Thr Glu Glu His Lys Phe Gln Ser Ala Leu Leu Phe Gln His Glu Asp Leu Ile Gly Lys Cys His Ala Phe Asp Gly Thr Ile Leu Phe Leu Pro Lys Arg Leu Gln Gln Glu Gln Val Ser Lys Glu Leu Ile Gly Leu Val Val Leu Thr Lys Tyr Asn Asn Lys Thr Tyr Arg Val Asp Asp Ile Asp Trp Asp Gln Thr Cys Leu Gin Phe Tyr Asn Ile Ile Phe Arg Arg Leu Leu Lys Ile Met Asn Leu Gin Gin Ile Giy Arg Asn Tyr Tyr Asn Pro Asn Asn Pro Lys Ser Thr Phe Lys Lys Ala Asp Gly Ser Glu Val Ser Phe Leu Glu Tyr Tyr Arg Lys Gln Tyr Asn Gln Glu Ile Thr Asp Arg Thr Glu Ala Tyr Leu Arg Val Leu Gln Gln Lys Val Thr Ala Asp Thr Gln Ile Val Val Cys Leu Leu Ser Ser Asn Arg Lys Asp Leu Lys Gin Pro Val Leu Val Ser Gin Pro Lys Arg Arg Arg Gly Pro Gly Gly Thr Leu Pro Gly Pro Ala Met Leu Ile Pro Glu Leu Lys Tyr Asp Ala lle Lys Lys Tyr Leu Cys Thr Asp Cys Pro Thr Pro Ser Gln Cys Val Val Ala Arg Thr Leu Gly Lys Gln Gln Thr Ala Ala Asn Ser Leu Ile Gin Asn Leu Phe Lys Vai Thr Pro Ala Met Gly Met Gin Met Arg Lys Ala Ile Met Ile Giu Vai Asp Asp Asp Trp Ser Lys Glu Thr Arg Gly Ala Pro Leu Ile Ser Val Lys Pro Leu Asp Asn Trp Leu Leu Ile Tyr Thr Arg Arg Asn Tyr Glu Lys Val Thr Glu Val Phe Ser Lys Thr Arg Asn Gly Glu Asp Val Arg lle Thr lle Thr Leu Thr Asn Glu Leu Pro Pro Thr Ser Pro Ser Asn Leu Leu Ser Phe Ser Gly Arg Ile Leu Gln Thr Glu Lys Ile His Gln Gly Gly Lys Thr Phe Asp Tyr Asn Pro Gln Phe Ala Met Ile Phe Gly Val Asn Thr Arg Gln Asn Leu Asp His Val Lys Glu Ser Lys Thr Gly Ser Ser Gly Ile Ile Val Arg Leu Ser Thr Asp Pro Ile Asp Ile Pro Ser His Arg Leu Val Ile Trp Pro Gly Phe Thr Thr Ser Ile Leu Gln Tyr Glu Asn Ser Ile Met Leu Cys

Figure 1 Continued

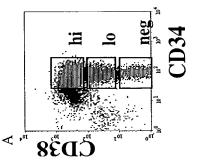
775 540 009 630 099 069 750 570 720 Arg Trp Phe Ser Arg Cys Ile Phe Gln Asp Arg Gly Gln Glu Leu Val Asp Gly Leu Lys Val Cys Leu Gln Ala Ala Leu Arg Ala Trp Asn Ser Cys Asn Glu Tyr Met Pro Ser Arg Ile Ile Val Tyr Arg Asp Gly Val Gly Asp Gly Gln Leu Lys Thr Leu Val Asn Tyr Glu Arg Phe Phe Ala Gin Ser Gly Gly Arg Leu Gin Asn Pro Leu Pro Gly Thr Val Ile Asp Val Glu Val Thr Arg Pro Glu Trp Tyr Asp Val Met Ala Ile Ala Thr Lys Ile Ala Leu Gin Met Asn Cys Lys Met Gly Gly Glu Leu Trp Arg Val Asp Ile Pro Leu Lys Leu Val Val Pro Gin Phe Leu Asp Cys Leu Lys Ser Ile Gly Arg Gly Tyr Asn Pro Arg Leu Thr Val Ile Val Val Lys Lys Arg Val Asn Thr Met Ile Val Gly Ile Asp Cys Tyr His Asp Met Thr Ala Gly Arg Arg Ser Ile Ala Gly Phe Val Ala Ser Ile Asn Glu Gly Met Thr Phe Phe Ile Val Ser Gln Ala Val Arg Ser Gly Ser Val Ser Pro Thr His Tyr Asn Val Ile Tyr Asp Asn Ser Gly Leu Lys Pro Asp His Ile Gln Arg Leu Thr Tyr Lys Leu Cys His Ile Tyr Tyr Asn Trp Pro Gly Val Ile Arg Val Pro Ala Pro Cys Gln Tyr Ala His Lys Leu Ala Phe Leu Val Gly Gln Ser Ile His Arg Glu Pro Asn Leu Ser Leu Ser Asn Arg Leu Tyr Tyr Leu

Figure 1 Continued

PIWI	MADDQGRGRRRPLNEDDSSTSRGSGDX					<i>~</i> •
	M M	F	G	R	ь 	ρŢ
HIWI	M	IF-	G	VNTRC	NTDHA	
PIWI	REGGPPERKPWGDQYDYLNTRPVELV K E			RLKTKPEWRIV		122
HIWI						
PIWI	PSIENPRVRMGVLSNHANLLGSGYLF P +E R+R +L H +L+G + F					183
HIWI	PLMEARRLRSALLFQHEDLIGKCHAF	DGTILFL:	PKRLQQKVTE	VFSKTRNGEDV	/RITITLT	
PIWI	GFISCAEPRFLQVLNLILRRSMKGLN + P LQ N+I RR +K +N	L+ +GRN	++P I+3	++ +WPG-	+ TSI Q+	244
HIWI	NELPPTSPTCLQFYNIIFRRLLKIMN	LQQIGRN	YYNPNDPIDI	PSHRLVIWPG	FTTSILQY	
PIWI	EKDILLGTEITHKVMRTETIYDIMRR E I+L T+++HKV+R+ET+ D M	H	H Q++V	++ L+VLT Y	NN+TYR++	305
HIWI	ENSIMLCTDVSHKVLRSETVLDFMFN	FYHQTEE	HKFQEQVSKI	ELIGLVVLTKY	NNKTYRVD	
PIWI	DVDFGQTPKSTF-SCKGRDISFVEYY D+D+ Q PKSTF G ++SF+EYY	+YN	I D QP+L-	+S+ R +	+	366
HIWI	DIDWDQNPKSTFKKADGSEVSFLEYY	RKQYNQE	ITDLKQPVLV	/SQPKRRRGPG	GTLPGPAM	
PIWI	LIPELCRVTGLNAEMRSNFQLMRAMS LIPELC +TGL +MR++F +M+ ++	+TR+ P	+QR RI	- + H+ N	LR	427
HIWI	LIPELCYLTGLTDKMRNDFNVMKDLA	VHTRLTP	EQRQREVGRI	LIDYIHKNDNV	QRELR	
PIWI	DWNMELDKNVTEVQGRIIGQQNIVFH DW + D N+ GRI+ + I H	I G	N ADW	+ R +++	LD W	488
HIWI	DWGLSFDSNLLSFSGRILQTEKIH	IQGGKTFD	YNPQFADWS	KETRGAPLISV	KPLDNW	
PIWI	AVIAPQRNSHELRTLLDSLYRAASGM +I +RN +L+ +L++ M					
HIWI	LLIYTRRNYEAANSLIQNLFKVTPAN	IGMQMRK-	AIMIEVDDR'	TEAYLRVLQQK	VIQTQATV	•
PIWI	LCLVPNDNAERYSSIKKRGYVDRAVE	PTQVVTLK	TTKKPYSLM	SIATKIAIQLN +IATKIA+Q+N	CKLGYTPW CK+G W	610
HIWI						
PIWI	MIELPLSGLMTIGFDIAKSTRDRKRA +++PL +M +G D +R+	AYGALIAS + +AS	MDLQQNSTY	FSTVTECSAFD FS	VLANTLWF L+ L	
HIWI	RVDIPLKLVMIVGIDCYHDMTAGRRS					•
PIWI	MIAKALRQYQHEHRKLPSRIVFYRDX + ALR + + +PSRI+ YRDX					. 732
HIWI						
PIWI	AYIVVTRSMNTRFFLNGQNPPI IVV + +NTRFF QNP I			YLVSQQVRQG1 ++VSQ VR G+		
HIWI	TVIVVKKRVNTRFFAQSGGRLQNPL	PGTVIDVE	VTRPEWYDF	FIVSQAVRSGS	VSPTHYNV	7
PIWI	LYSSMGLSPEKMQKLTYKMCHLYYNV +Y + GL P+ +O+LTYK+CH+YYNV					854
HIWI	IYDNSGLKPDHIQRLTYKLCHIYYNV					55,
PIWI	KFYYL + YYL 859	1		Pierre 1		
нтит	RLYYL	1		Figure 1		

Continued





9

3 4

В

Figure 2

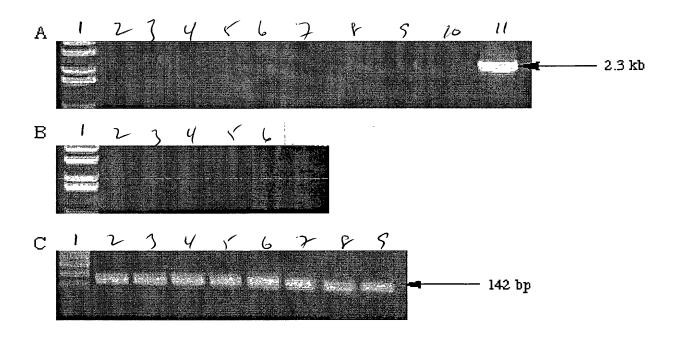


Figure 3

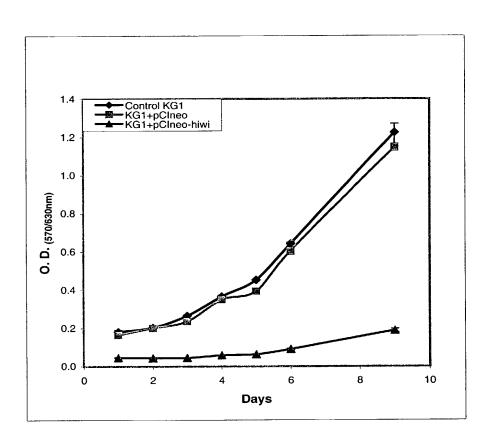


Figure 4

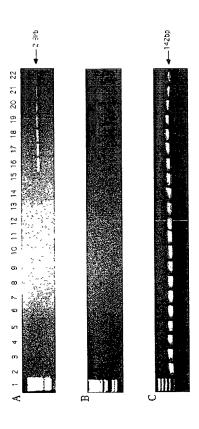
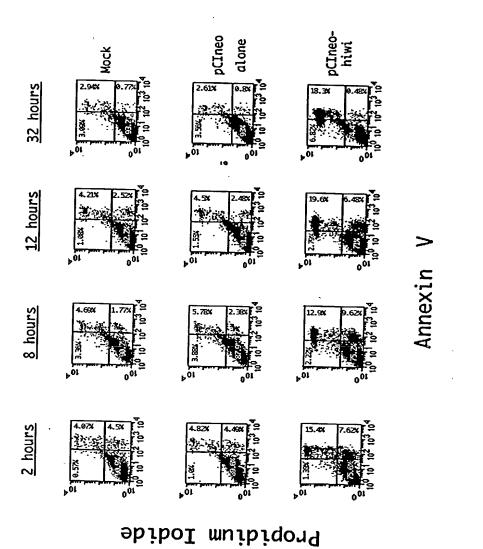


Figure 5



В

Heart Brain Kidney Liver Lung Thymus Prostate Testis Leukocyte Ovary Small intestine Placenta

> Pancreas Water control 1 Kb Ladder

1 Kb Ladder Skeletal muscle

1 Kb Ladder Heart Brain

Kidney Liver

 \triangleright

Lung

Skeletal muscle

Spleen

Thymus

Water control

1 Kb Ladder

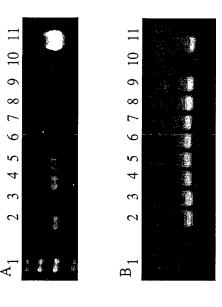


Figure 8



Figure 9

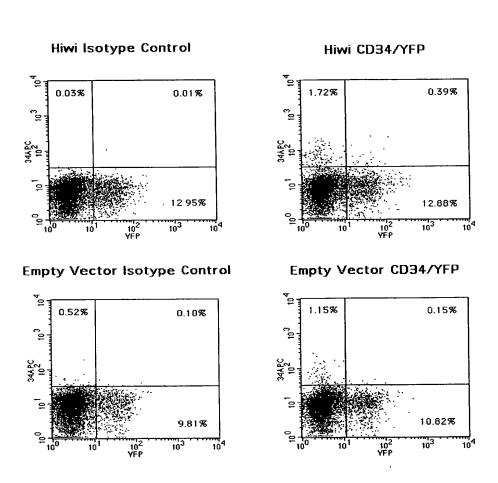


Figure 10